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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,412	06/23/2000	Melvin Richard Zimowski	ST9-99-080	9095

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EXAMINER
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NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/602,412

Applicant(s)

ZIMOWSKI, MELVIN RICHARD

Examiner

Quang N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action***

1. This Office Action is in response to the Amendment filed on 03/14/2006. Claim 40 has been added as a new claim. Claims 1-40 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claim 1, 4-9, 11, 13, 16-21, 23, 25, 28-33, 35, 37-39 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al. (US 6,298,373), hereinafter "Burns".**

4. As to claim 1, **Burns** teaches a method for managing data stored in a data storage device connected to a computer, comprising:

determining that a web page to be cached, wherein the web page references other objects (a policy manager 128 which defines and administers rules that determine which documents or resources, i.e., web pages, are cached in the cache memory 124,

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*for instance, a Web page, which references other objects such as images, audio or video tiles, from a frequently visited Web site*) (**Burns, C5: L8-20 and C10: L48-55**);

storing the referenced objects in one or more data stores (*if the Web page references or includes continuous data files, such as audio or video files, these referenced files are stored in a continuous media server CMS 126*) (**Burns, C5: L8-20**);

caching the web page in a cache (*caching the content received from the content provider, i.e., caching the frequently requested Web page in the cache memory 124 based on the policy manager 128*) (**Burns, C5: L8-20 and C10: L48-55**); and

automatically managing the cached web page and the referenced objects to ensure the display of a complete web page (*the target specifications embedded in the Web page to reference the continuous data tiles are modified/managed to reference the local copy of the continuous data files so that the continuous video/audio data stream can be rendered just-in-time by the subscriber, i.e., to ensure the display of a complete web page with all the referenced objects*) (**Burns, C5: L8-22 and C9:L42 - C10:L10**).

5. As to claim 4, **Burns** teaches the method of claim 1, further comprising:

receiving a request to generate a dynamic web page (*receiving a request for the CNN Web page from the first subscriber of 6:40 AM*); and

retrieving data and placing the data in a dynamically generated web page (*the local service provider 110 serves the Web page, with hyperlinks to various data items, such as audio and/or video clips, from the cached memory 124*) (**Burns, C9:L42 - C10:L10**).

6. As to claims 5-6, **Burns** teaches the method of claim 4, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data (*or linked objects*) based on administrator-provided input (*time-to-live "TTL" tags are computed by the local service providers and assigned to the content to assist in determining when the content should be refreshed or disposed/deleted*) (**Burns, C10:L59 - C11:L19**); and

deleting the retrieved data (*linked objects*) based on the administrator-provided input (*deletion policies are a function of the content itself, i.e., the content will be deleted when its "TTL" tag assigned by the administrator of local service providers expires, how frequently the content is requested, etc.*) (**Burns, C10:L59 - C11:L19**).

7. As to claim 7, **Burns** teaches the method of claim 1, further comprising, processing a caching directive that specifies whether the web page should be cached (*a policy manager 128 defines and administers rules that determine which documents, i.e., web pages, are cached in the cache memory 124*) (**Burns, C10: L48-55**).

8. As to claims 8-9, **Burns** teaches the method of claim 1, further comprising, associating an expiration timestamp with the web page, wherein the expiration stamp defines a time period in which the cached web page is valid (*time-to-live "TTL" tags are computed and assigned to the content to assist in determining when the content should be refreshed or disposed, i.e., when the time-to-live "TTL" expires, the content is no longer valid and should be updated or deleted*) (**Burns, C10:L59 - C11:L19**).

9. As to claim 11, **Burns** teaches the method of claim 8, wherein managing the cached web page and referenced objects comprising:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria (*the local service providers, i.e., the administrators, might compute the "TTL" tags for the content it caches in cache memory based on some specified selection criteria*) (**Burns, C10:L65 - C11:L14**); and

deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria (*deletion policies are a function of the content itself, for example, when the "TTL" set by the administrator expires, how frequently the content is requested, etc., the content will be deleted*) (**Burns, C11: L15-19**).

10. As to claim 37, **Burns** teaches the method of claim 1, wherein at least one of the referenced objects is not stored in said cache (*the audio and video clips referenced by the hyperlinks are stored in the content media server CMS 126*) (**Burns, C9: L45-48**).

11. Claims 13, 16-21, 23 and 38 are corresponding apparatus claims of method claims 1, 4-9, 11 and 37; therefore, they are rejected under the same rationale.

12. Claims 25, 28-33, 35 and 39 are corresponding article of manufacture claims of method claims 1, 4-9, 11 and 37; therefore, they are rejected under the same rationale.

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13. As to claim 40, **Burns** teaches the method of claim 1, wherein the cached web page and the referenced objects are automatically managed ensuring the display of a complete web page by referencing a dependency table storing relation information for the cached web page and the referenced objects *(a conversion table can be constructed which converts requests from referencing the files at the "original" Web site to referencing the files in the "local" CMS 126, inherently, the conversion table must have included the "original" links to the target data content at the "original" Web site and the "modified" links to the target data content at the "local" CMS 126, wherein both "original" and "modified" links are associated/embedded with/within the corresponding cached web page, i.e., containing relation information for the cached web page and the referenced objects) (Burns, C9: L52-65).*

### **Claim Rejections - 35 USC § 103**

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 2-3, 10, 12, 14-15, 22, 24, 26-27, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns, in view of Shimomura et al. (US 6,526,580).**

16. As to claims 2-3, **Burns** teaches the method of claim 1, but does not explicitly teach when one or more of the referenced objects is deleted, deleting the web page from the cache and vice versa.

In an analogous art, **Shimomura** teaches a broadband data broadcast system that allows rich multimedia content including audio, video, text, web pages, etc., to be delivered to a plurality of subscribers, wherein a multimedia receiver/server system 700, as illustrated in Fig. 7, comprises one or more caching applications 745 selectively captures multimedia information and stores that multimedia content information 753 in a file system 750. The caching application 745 may also handle cache clean up as old and outdated information should be removed from the file system 750 to conserve resources. **Shimomura** teaches the caching application 745 informs the web page constructing application 760 about multimedia information being removed from the file system 750 such that the web page constructing application 760 can remove references to deleted information (*i.e., remove web pages that contain deleted referenced objects and vice versa*) (**Shimomura, C11: L3-42**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **Burns** and **Shimomura** to remove references to deleted information (*i.e., delete the web page from the cache when one or more of the referenced objects is deleted and vice versa*) since such methods were conventionally employed in the art to allow the system to organize and manage a cache object store as old and outdated information should be removed from the cache object store to conserve resources (**Shimomura, C11: L8-10**).

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17. Claims 10 and 12 contain similar limitations as those of method claims 2-3; therefore, they are rejected under the same rationale.

18. Claims 14-15, 22 and 24 are corresponding apparatus claims of method claims 2-3, 10 and 12; therefore, they are rejected under the same rationale.

19. Claims 26-27, 34 and 36 are corresponding article of manufacture claims of method claims 2-3, 10 and 12; therefore, they are rejected under the same rationale.

### ***Response to Arguments***

20. In the remarks, Applicant argued in substance that

(A) Prior Arts fails to disclose or suggest “***automatically managing the cached web pages and the referenced objects to ensure the display of a complete web page***”, as claimed in independent claims 1, 13 and 25.

As to point (A), **Burns** teaches based on a policy manager 128 included in a local service provider 110, which defines and administers rules that determine which documents or resources are cached in the cache memory 124 (*i.e.*, determining web pages to be cached), a web page, for example, the CNN web page is downloaded over the Internet and stored in the cache memory 124 (*i.e.*, caching the web page in a cache), if the CNN web page contains links to any audio or video clips of recent news, these data files are also downloaded and stored in the Continuous Media Server CMS

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126 (*i.e., storing the referenced objects in one or more data stores*). The links within the cached web page are modified to reference the audio and video files stored locally in the CMS 126, instead of the files maintained at the CNN web site. So, when requested by a subscriber, the CNN web page will be served from the cache memory 124 and the continuous video/audio data stream can be rendered immediately from the CMS 126 for just-in-time rendering on the subscriber's computer, hence, the complete web page can be served from the local service provider 110 (*i.e., automatically managing the cached web page and the referenced objects to ensure the display of a complete web page*) (Burns, C5: L8-22 and C9:L42 - C10:L10).

21. Applicant's arguments as well as request for reconsideration filed on 03/14/2006 have been fully considered but they are moot in view of the new ground(s) of rejection.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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